



*RENEWABLE
ENERGY
PROGRAM*

**CALIFORNIA
ENERGY
COMMISSION**

RENEWABLE ENERGY PROGRAM

QUARTERLY REPORT TO THE
LEGISLATURE

April 2003 through June 2003

COMMITTEE REPORT

**JULY 2003
P500-03-022V2**



Gray Davis, Governor

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



July 31, 2003

Members of the Senate Energy, Utilities and Communications Committee
Members of the Senate Budget and Fiscal Review Committee
Members of the Senate Appropriations Committee
Members of the Assembly Utilities and Commerce Committee
Members of the Assembly Budget Committee
Members of the Assembly Appropriations Committee
California State Capitol Building
Sacramento, California 95814

RE: California Energy Commission's *Quarterly Report to the Legislature* Concerning the Renewable Energy Program

Honorable Members:

The California Energy Commission is pleased to submit its *Quarterly Report to the Legislature* for the second quarter of year 2003, covering the period April 1 through June 30, 2003. As required by the Public Utilities Code, Article 5, Section 445(g), the Energy Commission must submit quarterly reports on fiscal and functional aspects of the Renewable Energy Program.

As reflected in this report, the Energy Commission continues to make excellent progress in implementing the Renewable Energy Program and, in collaboration with the California Public Utilities Commission, developing the implementation rules for California's new Renewable Portfolio Standard.

Should you have any questions or comments concerning these reports, please contact Cecile Martin, Legislative Director, at 654-4942 or by e-mail at [cmartin@energy.state.ca.us].

Respectfully submitted,

JOHN L. GEESMAN
Commissioner and Presiding Member
Renewables Committee

JAMES D. BOYD
Commissioner and Associate Member
Renewables Committee

Enclosures

cc: California Legislative Analyst's Office

California Energy Commission's Quarterly Report Regarding the Renewable Energy Program (April 1 – June 30, 2003)

The California Energy Commission (Energy Commission) is pleased to submit its *Quarterly Report to the Legislature on the Renewable Energy Program*, covering the period April 1 through June 30, 2003. The Energy Commission is required to report to the Legislature quarterly on fiscal and functional aspects of the program.¹

This report describes the Energy Commission's implementation activities over the second quarterly reporting period of year 2003, including information regarding awards submitted to the State Controller for payment,² the cumulative commitment of claims by program, the demand for funds by program, and related matters.

Given that the Renewable Energy Program's funding mechanisms are ongoing, open solicitations, the amount of available funds is subject to change on a daily basis to meet the changing needs of program participants. Consequently, this report provides a snapshot of the status of the Renewable Energy Program and a forecast of future awards based upon market conditions and program trends at the time of this writing. This is accomplished by documenting the fund expenditures and commitments from the Renewable Resources Trust Fund, with a focus on the Renewable Energy Program activities in the second quarter of year 2003 and an estimate of occurrences in the upcoming quarter.

Below is background on the Renewable Energy Program, followed by an overview of the newly legislated Renewable Portfolio Standard (RPS) and its relationship to the Renewable Energy Program, and summaries of the Renewable Energy Program implementation activities and the Renewable Resource Trust Fund expenditures. The remainder of this report discusses activities occurring in each program area during the second quarter of 2003, and summarizes the accomplishments of the Renewable Energy Program to date.

Background on the Renewable Energy Program

In 1996, the Legislature created the Renewable Energy Program to foster the development of renewable electricity generation technologies and expand the renewable energy market in California. To administer the program, the Legislature authorized the collection of funds from 1998 through 2001. In 2001, the Legislature extended the Renewable Energy Program from 2002 through 2006.

This section summarizes the Renewable Energy Program from 1998 to 2001 and from 2002 through 2006. For additional details about the Renewable Energy Program, the reader can refer to the Renewable Energy Program's most recent *Annual Project Activity Report to the Legislature*.³

Renewable Energy Program – 1998 through 2001

With the goal of maintaining the benefits and diversity offered by renewable energy, Assembly Bill 1890 (Brulte, Chapter 854, Statutes of 1996) created the initial Renewable Energy Program, which became operational in 1998. Senate Bill 90 (SB 90, Sher, Chapter 905, Statutes of 1997) established the Renewable Resource Trust Fund and directed the Energy Commission to distribute the fund through distinct program areas, each with funding mechanisms uniquely fashioned to move the renewable energy industry towards market competitiveness as follows:

- Production incentives for the existing renewable electricity generators online before 1996,
- Auction awards for new renewable electricity generators once they came online and produced electricity,
- Rebates for consumers who purchased and installed on-site generating systems utilizing renewable fuels,
- Credits for customers who purchased electricity generated with renewable energy, and
- Renewable energy consumer education.

In January 1998, the Energy Commission adopted overall funding directives, eligibility requirements, yearly allocations, and specific guidelines to assist participants in applying for funding. Renewable Resource Trust Fund monies that were not awarded between 1998 and 2001 remain available to distribute to program participants after 2002.

In September 2000, the Legislature adopted Assembly Bill 995 (AB 995, Wright, Chapter 1051, Statutes of 2000) and Senate Bill 1194 (SB 1194, Sher, Chapter 1050, Statutes of 2000), which directed the three large IOUs to continue, beginning in 2002, collecting \$135 million per year from their ratepayers for the Renewable Resources Trust Fund. AB 995 and SB 1194 required the Energy Commission to recommend funding allocations and awards to the Legislature, which it provided in June 2001, in a report titled, *Investing in Renewable Electricity Generation in California (Investment Plan)*.⁴

Renewable Energy Program – 2002 through 2006

The Legislature incorporated the *Investment Plan* into Senate Bill 1038 (SB 1038, Sher, Chapter 515, Statutes of 2002), which Governor Davis signed on September 12, 2002, extending the Renewable Energy Program beginning in 2003 and for the next five years. Although SB 1038 changed how funds are allocated, it retained the program's structure and funding mechanisms, with some modifications, as follows:

- The Existing Renewable Facilities Program offers financial incentives to support existing renewable facilities through a system of varying incentive amounts based on the market competitiveness of the eligible renewable technologies in the state.
- The New Renewables Program conducted auctions in 1998, 2000, and 2001 that awarded financial support to encourage new renewable electricity generation projects that were most likely to become competitive with conventional technologies. Once they come on-line, winning projects receive payments for their first five years of generation. The New

Renewables Program will also provide funding to renewable generators for their above-market costs of meeting the Renewable Portfolio Standards (RPS) requirements. (The RPS and its relationship to the Renewable Energy Program are discussed in detail later.)

- The Emerging Renewables Program grants capital cost rebates to assist customers who purchase and install renewable technologies for on-site generation. Increased sales encourage manufacturers and retailers to expand operations, which in turn should lower costs to consumers.
- Customer Credit incentives allow renewable providers to offer electricity products to their customers at prices competitive with conventional electricity products. In April 2003, the Energy Commission discontinued this program and reallocated the annual Customer Credit funding to the Consumer Education, Emerging Renewables and the New Renewables Programs (10 percent, 45 percent, and 45 percent respectively).
- The Consumer Education Program, through grants and contracts, increases public awareness of renewable energy and its benefits, and encourages support of renewable energy and purchases of renewable energy technologies through information dissemination and project demonstration.

In February 2003, after a series of public hearings, the Energy Commission adopted new program guidelines for the Existing Renewable Facilities, Emerging Renewables, and Consumer Education Programs.

SB 1038 required the Energy Commission to evaluate how to utilize the Customer Credit funds most effectively, in light of recent market changes, including whether the program should be continued. In April 2003, in response to this requirement, the Energy Commission adopted the *Customer Credit Renewable Resources Account: Report to the Governor and the Legislature*⁵ (*Customer Credit Report*). In the *Customer Credit Report*, the Energy Commission discontinued the Customer Credit program, while it authorized payments to providers for eligible 2002 and early 2003 activity. To permit these payments, the Energy Commission adopted guidelines for the Customer Credit Program in May 2003.

The next section provides an overview of how the RPS will be implemented, including how the Energy Commission and the CPUC are working together to develop the implementation rules.

Renewable Portfolio Standard

On September 12, 2002, the Governor also signed Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002), creating California's new RPS. SB 1078 requires retail sellers of electricity to increase their procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of their retail sales are procured from eligible renewable energy resources by 2017. The RPS is closely linked with the Renewable Energy Program, as indicated in Section 399.11(d) of the statute, which states that:

The California Renewable Portfolio Standard Program is intended to complement the Renewable Energy Program administered by the [Energy Commission] and established pursuant to Sections 383.5 and 445.

The New Renewables Program will provide supplemental energy payments (SEP) to renewable electricity generators for the above-market costs of renewable energy. Without such payments, the utilities may not be obligated to purchase renewable power to fulfill their RPS obligations. Thus, the state's success in achieving the RPS target may depend to a large extent on the availability of the funds in the New Renewables Program.

If the RPS program does not fulfill its promise of increasing the state's reliance on renewable energy, California will not gain the diversity, reliability, public health or environmental benefits that renewable energy offers. As envisioned by the Legislature in passing SB 1078, a successful RPS program could have the far-reaching effects of promoting stable electricity prices, stimulating sustainable economic development, creating new employment opportunities, and reducing the state's reliance on imported fuels.

The Energy Commission is collaborating with the California Public Utilities Commission (CPUC) to establish guidelines for successfully implementing the RPS. As the RPS rules develop, the Energy Commission will update program guidelines for the New Renewables Program, and RPS expenditures will be included in this report.

The next section provides a detailed discussion of the Energy Commission's roles and activities in the RPS.

Energy Commission and California Public Utilities Commission Collaboration

SB 1078 defined specific roles for the CPUC and the Energy Commission in implementing the RPS and indicated that both agencies work together; in response, both agencies initiated a collaborative process that was formalized in December 2002.

Since that time, the CPUC has been addressing its responsibilities in implementing the RPS through its proceeding titled, *Order Instituting Rulemaking to Establish Policies and Cost Recovery Mechanisms for Generation Procurement and Renewable Resource Development*.⁶ In consultation with the Energy Commission, the CPUC adopted rules on June 19, 2003, concerning the following:

1. The process for determining market price referents for electricity from non-renewable sources. The IOUs will hold solicitations to purchase electricity from renewable generators; bids above the referents may be eligible for SEPs from the Energy Commission.
2. The process for the IOUs to follow in selecting the "least cost" bidders of renewable energy that "best fit" the IOU's resource needs. The IOUs will use the process to select winning bidders from their solicitations to procure renewable electricity.

3. Flexible rules for compliance with annual procurement targets. If an IOU fails to procure sufficient renewable energy, despite the flexibility of the rules, the CPUC will impose penalties.
4. A process for establishing the standard terms and conditions to be used by all IOUs in contracting for eligible renewable energy resources. Parties will have an opportunity to negotiate terms and conditions during the third quarter of 2003.

The collaborative staff will continue on-going efforts to develop the implementation details on the CPUC-adopted decision. Next quarter, the CPUC expects to open a new proceeding to address RPS issues.

The Energy Commission is responsible for the following:

1. Certifying facilities as “eligible renewable energy resources.” This work will largely be conducted through the New Renewables and Existing Renewable Facilities programs.
2. Establishing criteria for “incremental” output from existing geothermal facilities. This determination distinguishes between generation from geothermal resources that can be counted towards the baseline amount of renewable resources and what can be procured to meet the annual targets.
3. Designing and implementing an accounting system to verify retail sellers’ compliance with the RPS, and ensuring that generation is counted only once in this or any other state.
4. Allocating and awarding SEPs, as specified in SB 1038, to eligible renewable energy facilities to cover above-market costs of procuring renewable energy to meet RPS requirements.

The Energy Commission is developing rules to implement the RPS through a phased approach. Phase 1, which has already been completed, addressed eligibility issues for renewable generating facilities. Phase 2 addresses the rules for distributing SEPs and developing a tracking and accounting system. The Energy Commission is currently addressing these issues through policy decisions, which will then be implemented through guidelines or regulations, as appropriate.

Last quarter, the collaborative staff held a workshop to solicit public input on defining eligible resources, including determining what constitutes incremental geothermal and determining the eligibility of out-of-state power. On April 25, 2003, the Renewables Committee (Committee) released a draft report providing recommendations on these issues, titled *Renewables Portfolio Standard: Decision On Phase I Implementation Issues*,⁷ which also incorporated written and oral comments received at the staff workshop held on March 25, 2003. The Committee then held a hearing on May 5, 2003, to receive public comments on the draft report. After incorporating those public comments, the Energy Commission adopted the *Final Commission Report*⁸ at its Business Meeting on June 11, 2003.

The collaborative staff held workshops at the Energy Commission on May 12 and 13, 2003 to discuss the following Phase 2 issues:

- Allocating and awarding SEPs,
- Developing a process to certify in-state resources, and
- Developing an RPS tracking and verification system.

The *Preliminary Committee Draft Renewables Portfolio Standard: Decision On Phase 2 Implementation Issues*⁹ was released for public comment on June 30, 2003. The Energy Commission expects to adopt the final Phase 2 decision report in the third quarter of 2003. In the following quarter, the Energy Commission will begin developing guidelines to implement the Phase 1 and 2 decisions.

Renewable Energy Program Implementation

Last quarter, the Energy Commission adopted revised editions of the *Overall Program Guidebook*¹⁰ and guidelines for the Existing Renewable Facilities, Emerging Renewables, and Consumer Education Programs, as required by SB 1038. In the first quarter of 2004, the Energy Commission is expected to adopt a new guidebook for the New Renewables Program, which will include guidelines for disbursing SEPs to renewable electricity generators for their above-market costs. Under the RPS, the utilities will not be required to purchase renewable energy if costs are above a pre-determined benchmark price, unless there are sufficient SEP funds available in the Renewable Resource Trust Fund to offset the costs.

Table I shows the annual amount of funds to administer the Renewable Energy Program and the allocation among programs under SB 1038. Table I also reflects the Energy Commission's recent decision to discontinue the Customer Credit Account and reallocate the funds collected for Customer Credit under SB 1038 to the New Renewables, Emerging Renewables, and Consumer Education Programs.

**Table I - Renewable Resource Trust Fund
SB 1038 Allocations vs. Customer Credit Reallocations**

| Program | SB 1038 Allocations | | Customer Credit Reallocations | |
|-------------------------------|---------------------|------------------|-------------------------------|-----------------|
| | Percent of Total | \$ Million/Year | Percent of Total | \$ Million/Year |
| Existing Renewable Facilities | 20.0 | \$27.000 | 20.0 | \$27.00 |
| New Renewables | 51.5 | \$69.525 | 56.0 | \$75.60 |
| Emerging Renewables | 17.5 | \$23.625 | 22.0 | \$29.70 |
| Customer Credit | 10.0 | \$13.500 | 0.0 | 0.00 |
| Consumer Education | 1.0 | \$1.350 | 2.0 | \$2.70 |
| TOTAL | 100 | \$135.000 | 100 | \$135.00 |

Table II highlights the key activities that occurred in each program during the second quarter of 2003, and lists the activities expected to occur during the third quarter. The staff's estimates of expected activities and funding in the next quarter are based on program trends at the time of this writing, and actual project activities and funding may vary from the staff's expectations. Table III shows the Renewable Energy Program's cumulative funding and expenditures, including disbursements for this quarter.

**Table II - Renewable Energy Program
Second Quarter 2003 Program Implementation**

| Implementation Activities and Funding Activities: April – June 2003 | Expected Funding and Implementation Activities: July – September 2003 |
|---|---|
| RPS Implementation | |
| <ul style="list-style-type: none"> The Energy Commission adopted Phase 1 decision covering: <ul style="list-style-type: none"> Eligibility of out-of-state power, Defining eligible renewable technologies, and Determining incremental geothermal generation. The collaborative staff held workshops on Phase 2 issues on May 12 and 13, 2003. The Committee released preliminary draft Phase 2 decision on June 30, 2003 covering: <ul style="list-style-type: none"> Distributing SEPs, Certifying renewable electricity generation facilities, and Developing the accounting system for the RPS. | <ul style="list-style-type: none"> The Committee will hold a hearing on Phase 2 issues on July 14, 2003. The Energy Commission expects to adopt its decision on Phase 2 issues in mid-September. The staff will begin developing guidelines to implement the Phase 1 and Phase 2 decisions in late September. |
| Existing Renewable Facilities Program | |
| <ul style="list-style-type: none"> Retroactive payments totaling \$18.3 million for 2002 generation were made in April 2003. \$3.4 million in payments were made this quarter for January, February, March, and April 2003 generation. A total of 378 facilities are registered as renewable suppliers; 101 facilities are eligible for funding from the Existing Renewable Facilities Program (ERFP). Payments totaling \$173.4 million have been made to eligible existing facilities for generation from 1998 through April 2003. ERFP rollover funds total \$14.3 million. | <ul style="list-style-type: none"> The rollover is expected to remain approximately the same due to anticipated larger payments during the summer months. An estimated \$5.9 million is expected to be paid during the third quarter of 2003. |
| New Renewables Program | |
| <ul style="list-style-type: none"> Payments totaling over \$2.2 million were made this quarter. To date, payments totaling \$25.7 million have been made to 35 on-line facilities for over 2,200 gigawatt-hours (GWh) of new renewable electricity generation. Forty projects are currently on-line and producing electricity, representing 259 megawatts (MW) of new renewable capacity. The Committee is considering the Petition to Reconsider canceling four funding awards totaling \$18 million. | <ul style="list-style-type: none"> The construction of new projects will continue, as will payments to on-line facilities. Funding Award Agreements with winning bidders in the second and third auctions will be finalized. Work will continue with the utilities and the CPUC to implement SB 1078 and SB 1038. The Committee will hold public workshops for stakeholders to discuss new proposed <i>Guidebook</i> rules. |

| Implementation Activities and Funding Activities: April – June 2003 | Expected Funding and Implementation Activities: July – September 2003 |
|--|---|
| Emerging Renewables Program | |
| <ul style="list-style-type: none"> • To date, payments for over 5,300 installed systems total \$82 million, representing about 20 MW of distributed capacity. • Payments totaling over \$8.8 million were paid this quarter for 554 installed systems in IOU service areas, for about 2.0 MW of capacity. • Funds encumbered to install over 2,000 systems in IOU service areas currently total over \$36 million, representing about 9 MW of capacity. • Approximately \$95 million of allocated funds will be available for rebates through 2006. • Over 3,300 reservation requests were received this quarter for systems in IOU service areas, compared to 1,000 received the previous quarter. • Work began on developing program improvements such as an on-line reservation request form and capabilities for sellers or purchasers to check on the status of their submittals electronically. • Program staff drafted work tasks associated with carrying out site visits to verify installed system compliance with system-reported information. | <ul style="list-style-type: none"> • The Energy Commission will continue to process reservations and pay rebates for qualified system installations. If reservation requests continue at current rates, funding would be depleted in 2004 at current funding levels. • Rebate reservations and payment amounts will be calculated at levels 20 cents-per-watt lower than the previous quarter, consistent with the declining rebate levels in the <i>Guidebook</i> that the Energy Commission adopted last quarter. • The Energy Commission will continue to update lists of eligible technology equipment and availability of funds on the program's website: [www.consumerenergycenter.org/erprebate] • The Energy Commission will continue to add features and information to our website to ease the application process and provide more information to participants. • The Energy Commission will implement site-verification visits to systems installed through the Emerging Renewables Program. |
| Customer Credit Program | |
| <ul style="list-style-type: none"> • The Energy Commission adopted the <i>Customer Credit Report</i> at its April 2, 2003, Business Meeting. The report recommends that payments be made on activity in 2002 through early 2003. • The <i>Customer Credit Account Guidebook</i>¹¹ was amended in May to authorize payment for market activity after December 2001. | <ul style="list-style-type: none"> • Monthly performance reports, including any amendments, will only be accepted until July 10, 2003. • Payments totaling \$5 million to \$7 million are expected to be made to the five active providers in the third or fourth quarter for activity in 2002 and early 2003, using SB 90 funds rolled over from 2001. |

| Implementation Activities and Funding Activities: April – June 2003 | Expected Funding and Implementation Activities: July – September 2003 |
|---|--|
| <p align="center">Consumer Education Program</p> <ul style="list-style-type: none"> • Payments to contractors and grant recipients totaled about \$226,000 this quarter. • To date, disbursements for consumer education activities total \$4.24 million. • The Local Government Commission completed its grant project; its final report and invoice were submitted in May. • Twin Pines Cooperative Foundation conducted a workshop and solar tour for non-profit housing industry professionals. • To date, Energy Solutions has enrolled six design projects and conducted feasibility analyses on four of the projects. The mix of projects includes (4) multifamily, (1) commercial, and (1) education. • The Solar Living Institute offered 10 one-day training classes this quarter throughout California. • The Rahus Institute conducted three solar energy workshops for educators. • FOX-TV produced and aired a ten-second ad promoting the www.calenergy.org website. • The American Wind Energy Association submitted its draft <i>Permitting of Small Wind Energy Systems Handbook</i> to the Energy Commission. • 10,000 brochures and fact sheets were updated to reflect recent changes in the Emerging Renewables Program. • The staff provided informational materials to San Diego Regional Energy Office, coordinator of the Solar Homes Tour in San Diego, to distribute to tour participants. | |
| | <ul style="list-style-type: none"> • In July, Twin Pines will survey all workshop and tour participants to determine the program's impact on their planning processes and will tally the results in August. • Energy Solutions will produce two case studies based on design projects assisted through their Renewable Energy New Construction program, and Energy Solutions will provide a review draft of the Tool Kit web pages. • The Solar Living Institute will continue to hold one-day solar training classes in July and August. • The American Wind Energy Association will finalize its <i>Permitting Small Wind Energy Systems Handbook</i>. • The Energy Commission is expected to co-sponsor the 2003 SolFest in Hopland in August, and the staff will exhibit its booth and host two workshops on the Emerging Renewables Program. |

The remainder of this report provides the details of the Renewable Energy Program activities for this quarter and summarizes the program's progress thus far.

Renewable Resources Trust Fund

By the end of the second quarter of 2003, the Energy Commission had awarded a total of \$344.2 million, reflecting payments (disbursements). Eligible applicants had reserved \$237.9 million, reflecting fund reservations (encumbrances). During the second quarter, disbursements to program participants totaled over \$32.9 million.

From January 1998 through December 31, 2002, the participating utilities fulfilled their requirements to collect \$540 million for the initial program under SB 90. During that period, \$15 million was transferred from the state's General Fund to the Emerging Program for rebates pursuant to Assembly Bill 29X, bringing the total funds collected to \$555.0 million. However, SB 19X subsequently directed the Energy Commission to transfer the unused funds designated for rebates to customers of Publicly Owned Electric Utility (POEU) service areas to the General

Fund to help reduce the state's budget deficit. These unused funds, which totaled over \$6.3 million, reduced the balance of total funds for the initial program to \$548.7 million. From January 2002 through June 2003, the participating utilities collected \$201.0 million from their ratepayers under SB 1038. However, the Budget Act of 2002 directed the loans of \$150 million to the General Fund and \$8.9 million to the California Consumer Power and Conservation Financing Authority. According to the Budget Act, the loan to the General Fund is not intended to adversely affect the Renewable Energy Program, and the California Consumer Power and Conservation Financing Authority is required to repay \$1 million by June 30, 2003, with the remainder to be repaid by June 30, 2004. These fund transfers and loans reduced the amount of funds that remain available to administer the program.

Table III provides a financial summary of the Renewable Resource Trust Fund as of the second quarter of 2003, reflecting cumulative fund disbursements and encumbrances since the beginning of the program in 1998, including funds disbursed and encumbered during this quarter, as well as showing funds loaned and transferred from the fund, as noted above.

Table III - Renewable Resource Trust Fund
Funding and Expenditures as of June 30, 2003
(\$ Millions)

| | Existing Renewable Facilities | New Renewables | Emerging Renewables | Customer Credit | Consumer Education | Total |
|---|-------------------------------|------------------------|-----------------------|-----------------|----------------------|------------------------|
| Collected Funds (SB 90) | 243.000 | 162.000 | 69.000 ¹² | 75.600 | 5.400 | 555.000 ¹³ |
| Collected Funds (SB 1038) | 40.202 | 103.521 | 35.177 | 20.101 | 2.010 | 201.011 |
| Total Disbursements | -173.414 | -25.728 | -82.001 | -58.857 | -4.240 | -344.240 |
| 2nd Quarter '03 Disbursements | -21.67 | -2.221 | -8.832 | 0.000 | -0.226 | -32.949 |
| Intra-fund Reallocations¹⁴ | -68.000 | 42.845 | 53.245 | -30.101 | 2.010 | 0.000 |
| General Fund Transfer | | | -6.308 ¹⁵ | | | |
| Subtotal | 41.788 | 282.638 | 69.114 | 6.743 | 5.180 | 405.462 |
| Encumbrances | -23.256 ¹⁶ | -170.072 ¹⁷ | -36.700 ¹⁸ | -6.743 | -1.141 ¹⁹ | -237.911 |
| Committed Funds²⁰ | 18.532 | 112.566 | 32.414 | 0.000 | 4.040 | 167.551 |
| Loans | | | | | | -158.900 ²¹ |
| Committed Funds Minus Loans | | | | | | 8.651 |

The Renewable Energy Program administers the Renewable Resources Trust Fund via ongoing solicitation and functions in response to fluctuations in market prices and other uncertainties.

Fund amounts shown in Table III change daily as funds are encumbered and paid to program participants.

The Energy Commission encumbered funds this quarter as follows:

- The Existing Renewable Facilities Program for payments to eligible existing facilities and for reallocated monies for the New Renewables Program's winning projects from the third auction.
- The New Renewables Program for projects with funding award agreements from the first, second, and third auctions. Committed funds are reserved for SEPs, which will begin when the RPS implementation rules are finalized and the New Renewables Program guidelines are in place.
- The Emerging Renewables Program for reservations for rebates for eligible systems.
- The Customer Credit Program for payments for generation in 2002 and early 2003.
- The Consumer Education Program for grant and contract activities.

The next sections of this report discuss the noteworthy activities that occurred in each program during the second quarter of 2003.

Existing Renewable Facilities Program

From 1998 through 2001, the Existing Renewable Resources Account (Existing Account) provided funding to existing renewable generation facilities. As of December 31, 2001, the Energy Commission suspended payments to all Existing Account facilities because the legislation authorizing the extension of the Renewable Energy Program had not yet been approved. The Existing Account disbursed a total of \$151.7 million by this date, with no further payments to be made from the initial Existing Account funding. On February 19, 2003, the Energy Commission adopted a new *Guidebook*, as directed by SB 1038, and renamed this area of the program the Existing Renewable Facilities Program (ERFP).

Facilities that are eligible for funding from the ERFP fall into one of two Tiers based on their generating technology. Tier 1 facilities use biomass or solar thermal technologies and Tier 2 facilities utilize wind technology. The funds available for each tier annually are allocated monthly in equal amounts, with any funds not disbursed in one month rolled over to the next month for distribution within the same tier.

Among the 378 facilities that are registered as renewable suppliers, 101 facilities are eligible for funding from the ERFP. During the second quarter of 2003, \$21.7 million was disbursed to eligible ERFP facilities, which included \$18.3 million in retroactive payments for 2002 generation. Of the payments made this quarter, \$17.8 was to Tier 1 facilities for 5,058 GWh of

generation, with \$3.8 million paid to Tier 2 facilities for 939 GWh. To date, all payments from the initial Existing Account and the ERFP funds total \$173.4 million to existing facilities.

From 1998 through 2000, the Energy Commission made payments totaling \$633,788 to Enron Wind LLC. However, during the second quarter of 2003, the bankruptcy court approved a settlement agreement between the Energy Commission and Enron Wind LLC for repayment of this amount due to Enron's misrepresentation of the ownership status of some of its facilities. Enron Wind LLC is scheduled to repay these funds over a two-year period.

The ERFP rollover amount currently stands at \$14.3 million.²² The Energy Commission has approved funds remaining from the initial Existing Account under SB 90 to be reallocated to the New Renewables Program. Although the amount of funds that will be needed for New Renewables Program projects is unknown, the staff is currently evaluating that amount (auction winners could drop out, qualify for additional incentives, or have their funding awards reduced or cancelled). When identified, the staff will recommend reallocating those funds accordingly.²³

New Renewables Program

Although the guidelines for the New Renewables Program have not yet been updated to reflect the changes in the program under the new legislation, new projects continue to be developed and come online in accordance with the guidelines from the initial program.

Among the successful bidders in the three New Renewables Program auctions held in 1998, 2000, and 2001, 71 projects continue to hold funding awards, with 40 projects on-line and contributing 259 MW of new renewable generating capacity to California's electricity supply.

During the second quarter of 2003, three projects came on-line: an 8.58 MW wind project from the first auction and two landfill gas projects totaling 6.3 MW from the second auction. Under the rules of the second auction, the two landfill gas projects will have their funding awards reduced by 50 percent based on their on-line dates.

Currently, 35 of the 40 on-line projects have received payments from the Energy Commission. To date, these projects have received a total of \$25.7 million in payments from the New Renewables Program, including \$2.22 million paid this quarter. Table IV summarizes these on-line projects, which have generated approximately 2,200 gigawatt-hours (GWh) of new renewable electricity.

**Table IV - New Renewables Program
Summary of On-Line Projects (June 1999 to June 2003)**

| Technology | MW On-Line | # of Projects |
|-------------------|-------------------|----------------------|
| Biomass | 11.30 | 2 |
| Digester Gas | 2.05 | 1 |
| Geothermal | 59.00 | 2 |
| Landfill Gas | 37.45 | 13 |
| Small Hydro | 11.25 | 2 |
| Waste Tire | 0 | 0 |
| Wind | 137.9 | 20 |
| Total | 258.95 | 40 |

Five facilities totaling 51.27 MW of capacity are delivering power to the grid but have not yet received incentive payments. These facilities include a 40.92 MW wind facility, a 2.05 MW digester gas facility, and three landfill gas facilities with capacities of 2 MW, 2.52 MW, and 3.78 MW. The Energy Commission has not made payments to these facilities for various reasons, including the following:

- Failure to submit invoices,
- Failure to provide adequate proof of generation, or
- Failure to provide adequate proof of being on-line.

Auction winners must generate a minimum of 85 percent of their estimated generation over the first three years of project operation. To avoid a penalty, auction winners that cannot meet the 85 percent requirement must notify the Energy Commission of the amount and reason for the expected reduced generation. At the Committee's discretion, the project's award can then be reduced to reflect the true average annual generation during the first three years. Project developers that do not notify the Energy Commission are subject to an additional reduction of 25 percent of their cents per kWh incentive for the final two years of payments.

During 2002, developers of three landfill gas projects from the first auction notified the Energy Commission that they would not meet their minimum generation requirements. During the second quarter of 2003, the Energy Commission approved the Committee's recommendations as follows: to immediately reduce two of these awards, but to give the third project six months to demonstrate substantially increased generation from newly refurbished equipment. The staff will continue to track project performance for all on-line projects and revise funding awards as necessary to reflect any reduced generation amounts or incentive penalties.

In the October 2000 and June 2001 auctions, the Energy Commission reduced the awards for five projects to correspond with funds available in those auctions at that time. The auction protocols state that if the last bid (or group of bids in the case of a tie) in an auction exceeds the amount of available funds, bidders have the choice of withdrawing from the auction or accepting a reduced award. In August 2002, the Energy Commission revised the program guidelines to

allow awards that were reduced under this provision to be augmented if funds later become available. During the second quarter of 2003, the Energy Commission approved the Committee's recommendation to restore the full award for each of these projects with funds that became available as a result of the bonus/penalty system in the second and third auctions.

Public Utilities Code section 383.5(c)(2)(B) was amended to allow New Renewables Program projects to come on-line after December 31, 2001 and still receive five years of incentive payments from the program, as long as the Energy Commission makes a formal finding that the delay in the on-line date resulted from "circumstances beyond the developer's control." The program guidelines allow projects to petition the Committee for extension, with the Energy Commission approving the Committee's decision at a regularly scheduled Business Meeting.

During the second quarter of 2003, the Energy Commission approved the Committee's decisions on five petitions for funding award extensions. Developers of two landfill gas facilities and two wind facilities demonstrated to the Committee's satisfaction that project delays were due to circumstances beyond the developers' control and were, therefore, allowed to extend their on-line dates to December 31, 2003. However, the developer of the fifth project, a landfill gas facility, was not able to demonstrate that the delayed on-line date was due to circumstances beyond the developer's control, and the Committee did not recommend extending that project's funding award.

The Energy Commission may possibly cancel funding awards for four wind projects from the first auction: three owned by Enron Wind Development Corporation and one owned by Painted Hills Wind Developers (an Enron affiliate). These projects total 113 MW. The project developers face award cancellations for failing to submit required information and maintain appropriate contact with the Energy Commission. The funding awards for these four wind projects total \$17.8 million. In March 2002, the Energy Commission informed the project developers of its intent to cancel their funding awards, and the project developers then submitted a joint Petition for Reconsideration to the Energy Commission. However, any decision to cancel these awards is complicated by Enron's bankruptcy status. The Energy Commission's legal counsel is consulting with bankruptcy law experts in this matter, and the Committee hopes to make a decision on the petition during the third quarter of 2003.

A 5.5 MW landfill gas project from the first auction cancelled its funding award during the second quarter of 2003. Any funds freed by award cancellations are returned to the Renewable Resource Trust Fund for reallocation.

Emerging Renewables Program

Consumer demand for rebates from the Emerging Renewables Program (ERP) increased dramatically in the second quarter of 2003, with over 3,300 applications submitted, compared to about 1,000 applications in the previous quarter. Nearly 70 percent of these applications arrived in June, with over 1,900 arriving the last week of June. The Committee suspects that the heightened demand results from the industry escalating its marketing efforts, public concerns over the state budget deficit, and the schedule to decrease the rebate on July 1, 2003.

During the second quarter of 2003, payments totaling over \$8.8 million were made for 554 system installations, bringing total disbursements to date to about \$82 million. More than 5,300 emerging renewable systems have been installed since the beginning of the program, representing approximately 20 MW of distributed renewable electricity capacity. Customers installing 2,050 systems hold confirmed rebate reservations for about nine MW of solar and wind capacity in various stages of completion, encumbering \$36.7 million.

Approximately \$95 million in total funding remains available for rebates through 2006. Unless additional funds are added or other measures are taken, funding will be depleted in 2004 at the current rate of processing 500 to 600 rebate applications per month.

Along with rebates, the state tax credit is another stimulus for consumers considering a solar or wind system. Designed to encourage the installation of systems up to 200 kW, Senate Bill 17XX (SB 17XX, Brulte, Chapter 12, Statutes of 2001-02) authorized the 15 percent credit for tax years 2001 through 2003, with a 7.5 percent credit for tax years 2004 and 2005. Early in 2002, the Energy Commission worked with the Franchise Tax Board to develop a worksheet for consumers to apply for the tax credit using a "self-certifying" process. Since then, the Energy Commission has updated the worksheet and supporting documents as necessary. The worksheet is available on the Energy Commission's website at:

www.consumerenergycenter.org/renewable/tax_credit.html

With assistance from the Renewable Energy Program's technical support contractor, KEMA-Xenergy, Inc., the staff continues to update the list of eligible renewable technology equipment and make it available to consumers online and via mail. In the coming quarter, the staff expects the KEMA-Xenergy team to begin conducting site visits to verify that systems installed through the ERP comply with the program requirements. The KEMA-Xenergy team will also finalize work to enhance the ERP website, making the application process easier and providing more information to participants on the status of their reservations. The Energy Commission will continue to update fund availability on the program's website at:

www.energy.ca.gov/renewables/emerging_renewables/funding.html

Customer Credit Program

Changes in California's electricity market structure, the suspension of direct access contracting, and the newly legislated RPS have affected the Customer Credit Program. As directed by SB 1038, on April 2, 2003, the Energy Commission produced the *Customer Credit Report*, which reported to the Governor and the Legislature on how to utilize the customer credit funds most effectively and discontinued the Customer Credit Account. However, the Energy Commission determined that providers would be paid for customer credits for eligible 2002 and early 2003 activity.

Through its adoption of the *Customer Credit Report* the Energy Commission shows its support of the renewable energy purchases that were made in 2002 and early 2003, while recognizing

that the current market situation vastly differs from the market scenario in 1998. Although customer choice is no longer an option, the RPS will provide an alternative for supporting renewable energy generation that does not require customers to enter into direct access contracts.

As outlined in the *Customer Credit Report* and illustrated in Table V, the Energy Commission reallocated the annual funds collected for the Customer Credit Program under SB 1038 to three of the other programs. The customer credit funds reallocated to the Consumer Education Program will be set aside to support and accelerate the design and development of an accounting and verification system, which is outlined in SB 1078 as one of the Energy Commission's roles in implementing the RPS.

**Table V - Fund Reallocations from
Customer Credit Account**

| Receiving Program | \$ Millions/Year | % of Total Customer Credit Funds |
|-----------------------------|-------------------------|---|
| Emerging Renewables Program | \$6.075 | 45 |
| New Renewables Program | \$6.075 | 45 |
| Consumer Education Program | \$1.350 | 10 |
| TOTAL | \$13.500 | 100% |

Although the Customer Credit Program did not make any payments during the second quarter of 2003, the staff expects payments to be made either late in the third quarter or during the fourth quarter, following the receipt of monthly performance reports (MPRs) from eligible providers. Final MPRs, along with any amendments, must be submitted by July 10, 2003. Three of the five active providers have submitted MPRs, and the staff expects to receive information from the remaining two providers. According to the staff estimates, payments to the five active providers will likely exhaust the available SB 90 funds rolled over from 2001.

Consumer Education Program

During the second quarter of 2003, payments to grant recipients and contractors totaled about \$226,000, bringing Consumer Education Program funds dispersed to date to \$4.24 million.

With the help of a contractor, the ICF Consulting team, program staff updated informational materials this quarter to reflect recent changes in the Emerging Renewables Program. The staff responded to several requests from renewable energy technology manufacturers and retailers, as well as from energy and environmental event organizers and speakers, to distribute our materials and promote the Renewable Energy Program to their customers and event participants.

Four renewable energy videos were among the Energy Commission's online training series that shared a "Best of Show" award this quarter. The two solar energy and two wind energy videos were presented at the 2003 National Workshop on State Building Energy Codes, which was sponsored by the U.S. Department of Energy in Atlanta, Georgia.

For the fourth year, the staff will participate at the eighth annual SolFest event (Renewable Energy & Sustainable Living Festival) in Hopland, California, on August 23-24, 2003. The Energy Commission is expected to co-sponsor this event, which includes an advertisement in the SolFest event guide, a link on the solarliving.org website, booth space for staff to talk with attendees and distribute materials, banner placement, co-hosting the renewable energy workshop area, and two hour-long workshops to educate attendees about the Emerging Renewables Program.

Work continues on the grant projects funded by the Consumer Education Program, while the ICF Consulting contractor prepares to finalize tasks, complete an evaluation of the public awareness campaign, and transition ongoing tasks to Energy Commission staff. Details on the grant and contract activities during this reporting period are provided below.

Grant Projects

The following are the significant grant project activities conducted during the second quarter of 2003:

- As of April, the Local Government Commission had provided technical assistance to 88 jurisdictions (cities, counties, schools, special districts, and utilities) through its SPIRE (Stimulating the Public-sector Implementation of Renewable Energy) Program. The final report and invoice were submitted with match funding totaling 65 percent of the total \$153,423 budget.
- Educators for the Environment developed a flyer to promote its *Teacher's Guide* and bookmarks. Reviewers' comments on the draft *Guide* were incorporated during this quarter.
- The Real Goods Solar Living Institute has conducted 14 one-day solar installer training classes across the state. The classes conducted this quarter were held in Anaheim, San Bernardino, San Diego, Oxnard, Santa Monica, Los Angeles, Hopland, and San Francisco. The Institute distributed another catalog announcing its seminars and classes for the second half of 2003.
- In April, Twin Pines Cooperative Foundation hosted a workshop at the Sacramento Convention Center and conducted solar tours in Davis. The workshop and tour were part of Housing California's three-day conference, a statewide coalition of affordable housing and homeless organizations. The Commission staff spoke on the state rebate for the affordable housing industry. Tours included visiting the solar installations at the Davis Food Co-Op, Muir Commons Co-Housing, and Homestead Affordable Cooperative Housing. The booklet developed by Twin Pines, *PV for Affordable and Cooperative Housing*, and other rebate materials, were provided to attendees.
- To date, the Energy Solutions' Renewable Energy New Construction Program has enrolled six design projects, consisting of (4) multifamily, (1) commercial, and (1) education facility. Preliminary feasibility studies and direct design assistance were provided to four design projects. A fifth project team requested an analysis of pre-engineered photovoltaic kits for

product comparison and evaluation of different roof orientations and their impacts. The development of the Tool Kit is still in progress, and a draft of the Tool Kit web pages is scheduled for review in the next quarter.

- Global Possibilities' Solar Building Tour 2002 project continued to distribute program tour guides throughout California this quarter. Each building location in the tour guide notes a website for the architect, solar installer, and/or homeowner for reference purposes.
- The Rahus Institute conducted two teacher training workshops, "Solar Schools: PV as a Learning Tool," at schools in San Francisco and San Jose this quarter. Other Solar Schoolhouse project activities included a presentation on the Solar Schoolhouse curriculum at the annual Association of Environmental and Outdoor Educators conference in Pescadero, California, a teacher training workshop in Anaheim, California, and participation on a "Solar for Schools" panel at the 32nd annual American Solar Energy Society (ASES) Conference in Austin, Texas.
- FOX-TV, Channel 40-Sacramento produced a ten-second ad promoting [www.calenergy.org], a website educating consumers about renewable energy, which aired for six weeks in May and June.
- During this quarter, voice-overs in English and Spanish were completed for "Sunny and Friends" project, a series of ten-second educational videos about different renewable energy topics.
- Early this quarter, the American Wind Energy Association (AWEA) team summarized its interviews with planners and permitting officials in the counties targeted for this project. The summary helped to clarify issues and guide the development of the handbook, *Permitting Small Wind Energy Systems*. At the Windpower conference in Texas in May, the AWEA staff collected early requests for the handbook. After incorporating reviewer comments on a draft *Handbook*, the AWEA staff submitted a revised draft, including graphic elements, in June.

Public Awareness Campaign

During the second quarter of 2003, the staff and contractor, ICF Consulting, continued to wrap up contract activities. The number of Renewable Energy Alliance members remains at 162, and the ICF Consulting staff is transitioning its management of the Alliance to the Energy Commission staff.

Under direction from Energy Commission staff, ICF Consulting revised the Emerging Renewables Program brochure to reflect current program information and procedures for reserving a rebate. Revisions were also made to the tax credit fact sheet and both informational materials were printed.

During this quarter, ICF Consulting prepared and distributed press kits to over 400 print publications in California. The kit provides energy and environmental editors with background information as they research and compose articles related to renewable energy.

The ICF Consulting team provided assistance to the San Diego Regional Energy Office (SDREO) with outreach and publicity for the 4th Annual Tour of Solar Homes held in May. The tour, featuring 22 area homes with solar photovoltaics and solar water heating, attracted 700 attendees (a record number) and generated two articles for the local newspaper.

The ICF Consulting team is working on the final report for the public awareness campaign, which includes conducting a survey to help assess the effectiveness of participation in trade shows and exhibits during 2001 and 2002. The contractor's final report will include a comprehensive analysis of all campaign activities, noting what worked and what did not, and recommending future needs for educating consumers about renewable energy.

Summary

Through its administration of the Renewable Energy Program, the Energy Commission continues to achieve its goals for the renewables industry and for Californians. Since the Renewable Energy Program began operating, the Energy Commission has accomplished the following:

- Brought over 259 MW of new renewables capacity on-line, with the potential for new projects to eventually total 1,200 MW of new renewable capacity for California's electric grid;
- Helped 275 existing facilities remain operative for 4,400 MW of renewables capacity;
- Supported over 200,000 customer purchases of electricity generated by renewable energy before the demise of direct access contracting options for electricity consumers;
- Provided rebates to more than 5,300 customers for installing on-site renewable technology systems, representing over 20 MW of solar and wind energy capacity, with an additional 2,050 systems representing nine MW currently in various stages of development; and
- Assisted Californians in making educated energy decisions by providing information to consumers statewide about renewable energy and the state's incentive programs, and about how they can support renewables in today's marketplace. The Energy Commission has leveraged more than 25 percent in seed money and in-kind contributions to foster renewable energy consumer education efforts statewide.

Finally, the Energy Commission is collaborating with the CPUC in developing rules for implementing the state's new RPS. This work will position California for maintaining its leadership in renewable energy development, though the success of the RPS venture will depend on the availability of sufficient funds in the Renewable Resource Trust Fund to meet the demands of procuring renewable energy in an uncertain market.

Endnotes

¹ Public Utilities Code (PUC), Article 5, Section 445(g).

² As a procedural matter, the Energy Commission submits awards directly to the State Controller for payment, rather than through the Treasurer.

³ Publication Number P500-02-068, December 2002.

⁴ Publication Number P500-00-022, June 2001.

⁵ Publication Number 500-03-008F, April 2003.

⁶ CPUC Rulemaking 01-10-24.

⁷ Publication Number P500-03-023D, April 2003.

⁸ Publication Number P500-03-023F, June 2003.

⁹ Publication Number P500-03-049D, June 2003.

¹⁰ Publication Number P500-03-004F, February 2003.

¹¹ Publication Number P500-03-047V4, May 2003.

¹² This amount includes \$15 million transferred from the General Fund pursuant to AB 29X.

¹³ This total does not include \$266,000 collected from ratepayers of the Bear Valley Electric Company or \$14,403 in voluntary contributions.

¹⁴ The Energy Commission has reallocated \$40 million from the Existing Renewable Facilities Program to the New Renewables Program for the second auction. However, \$6.2 million of these funds were redirected to the Emerging Renewables Program, thereby reducing the reallocation from the Existing Renewable Facilities Program to the New Renewables Program to \$33.8 million Pursuant to AB 29X, the Energy Commission reallocated \$15 million from the Existing Renewable Facilities Program to the Emerging Renewables Program in 2001. The Energy Commission reallocated \$10 million in unused funds from the Customer Credit Account to the Emerging Renewables Program in September 2001 and reallocated \$13 million from the Existing Renewable Facilities Program to the Emerging Renewables Program in September 2002. In April 2003, the Energy Commission approved reallocating Customer Credit funds collected under SB 1038 as follows: ten percent to the Consumer Education Program (specifically for the RPS tracking and verification program), 45 percent to New Renewables Program, and 45 percent to Emerging Renewables Program.

¹⁵ Unused POEU funds were returned to the General Fund pursuant to SB 19X.

¹⁶ Encumbered for retroactive payments to eligible ERF participants, and for potential reallocation to the New Renewables Program as winning projects from the third auction come on-line and become eligible for funding.

¹⁷ The Energy Commission conditionally awarded \$162 million at its June 1998 auction, \$40 million at its December 2000 auction, and up to \$40 million at its August 2001 auction. As funds become available, they are encumbered for new projects.

¹⁸ Encumbered for rebate reservation requests approved but not yet paid.

¹⁹ Encumbered for grant projects and contract tasks.

²⁰ Committed funds are not yet formally assigned to specific projects, but represent monies reserved to meet statutory requirements.

²¹ \$150 million was loaned to the state's General Fund and \$8.9 million was loaned to the California Consumer Power and Conservation Financing Authority pursuant to the Budget Act of 2002 (Items 3360-011-0382 and 3360-012-0382 respectively).

²² The rollover consists of the funds remaining in the ERF after payments have been made to facilities in a given monthly payment cycle. Any funds not paid in one month are rolled over and added to the following month's allocation, becoming available for that month's payments.

²³ After determining the amount of funds needed for reallocation to the New Renewables Program, any remaining funds shall be available for the ERF under SB 1038.